

- d) selecting at least one transgenic individual derived from each backcross until the isotransgenic line is produced.

2. (AMENDED) The method of Claim 1, wherein the selecting hybrid primary transformants comprises identifying genomic sequences adjacent to the T-DNA inserted and determining the parent genome which has received said T-DNA.

3. (AMENDED) The method of Claim 2, wherein determining the plant genome which has received the T-DNA is carried out according to a technique selected from the group consisting of an RFLP technique and a sequencing method.

- 4. (AMENDED) The method of Claim 1, wherein the individual selected in (d) has
 - a) a chromosome having the T-DNA but otherwise having a genotype entirely of the line of interest; and
 - b) a genome of interest to entire genome ratio of at least about 75%.

5. (AMENDED) The method of Claim 1 further comprising crossing the isotransgenic plant line and a second line of interest.

6. (AMENDED) The method of Claim 1, wherein the hybrid plant is selected from the group consisting of a crop plant, vegetable plant, and floral plant.

7. (AMENDED) The method of Claim 1, wherein the T-DNA comprises in particular a nucleotide sequence encoding a protein which confers agronomic properties and/or properties of resistance to diseases.

8. (AMENDED) The method of Claim 1, wherein the isotransgenic line is a commercial elite line.

9. (AMENDED) The method of Claim 1, wherein the isogenic plant is substantially free of fragments linked to the transgene which may be the subject of a genetic burden.

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10. (AMENDED) A method of identifying the parent genome which has received a T-DNA after transformation of a hybrid comprising identifying genomic sequences adjacent to the T-DNA inserted.

11. (AMENDED) A transgenic plant, organ or seed obtained by the method of Claim 1 or 5.

12. (AMENDED) An isotransgenic line produced from hybrid transformants by the method of Claims 1 or 7, wherein the isotransgenic line has a pure line of interest genotype over the entire genome and have stably integrated the T-DNA containing the transgene.

Please **add** the following new claims.

14. (NEW) The method of Claim 5, wherein the second line of interest is an isotransgenic plant line.

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15. (NEW) The method of claim 6, wherein the crop plant or vegetable plant is selected from the group consisting of maize, wheat, rapeseed, sunflower, pea, soybean and barley.

16. (NEW) A hybrid according to Claim 12, wherein the hybrid is produced according to the method of claim 5 and wherein the pure line of interest is a commercial crop line.